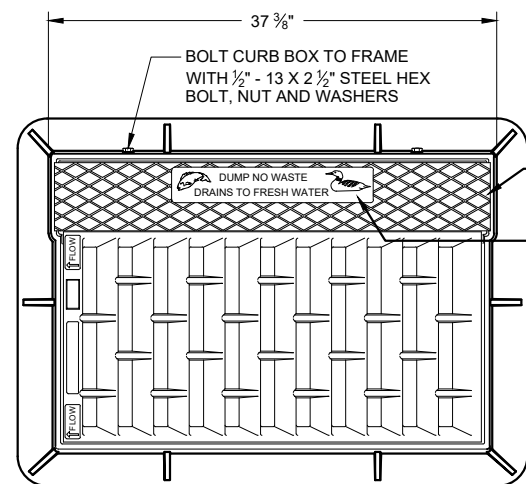
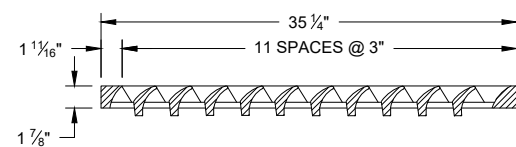
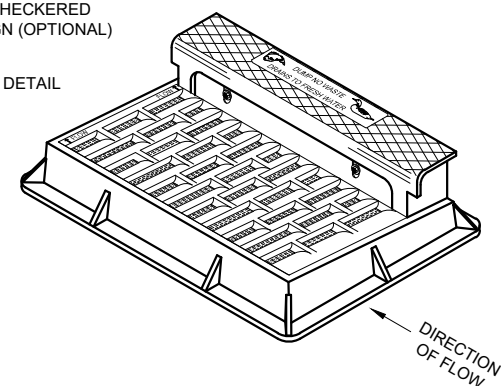




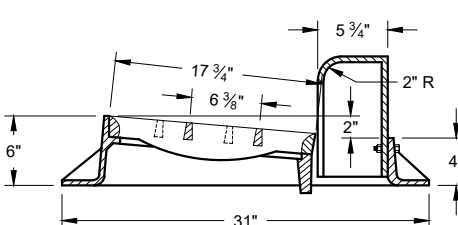
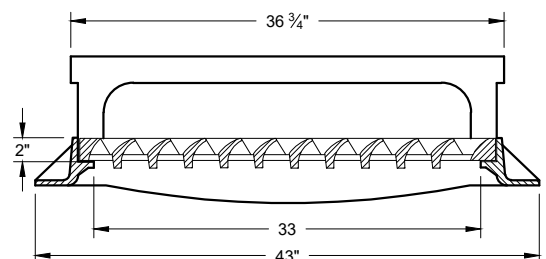
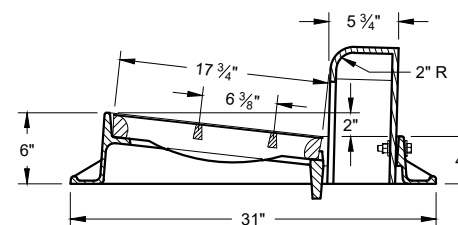
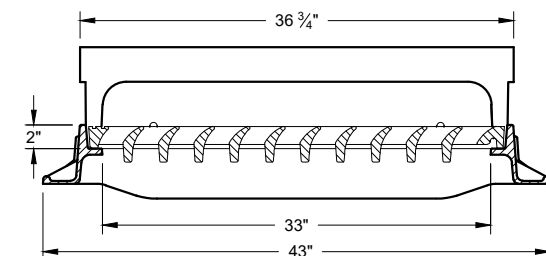
# SDD 8A5-a Inlet Covers Type A, H, A-S, H-S and Z



NOTE: EITHER CASTING IS ACCEPTABLE

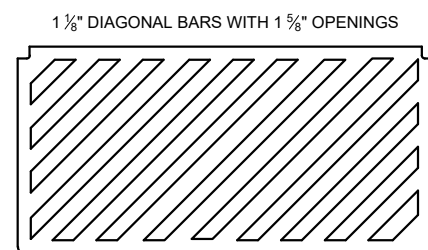


NOTE: CURB BOX HEIGHT ADJUSTABLE 6\" - 9\"



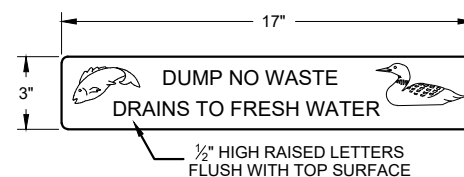
## TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

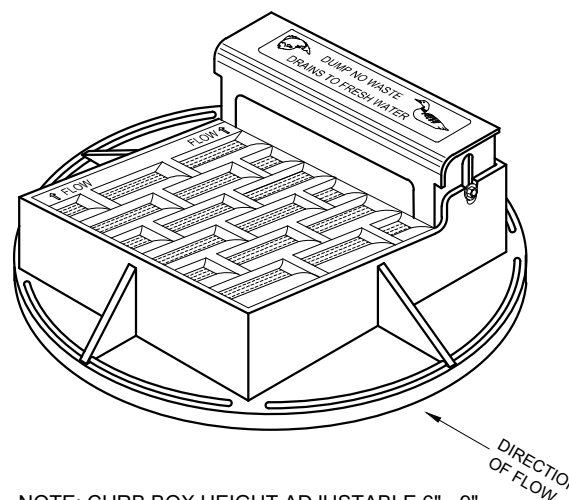


## SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 3/4" X 2")  
(NOTED AS TYPE H-S ON DRAINAGE TABLE)

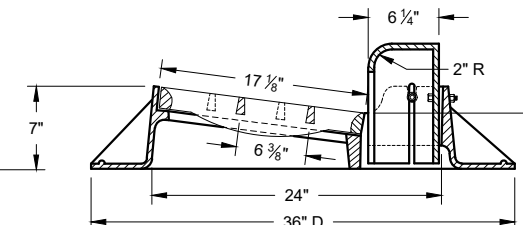
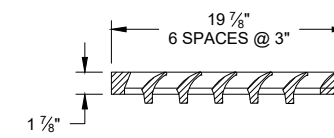
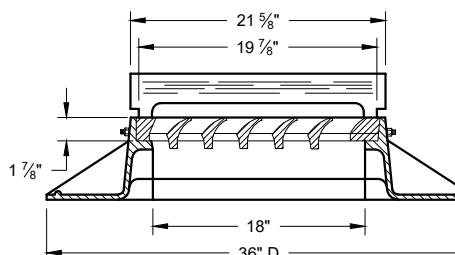


## LOGO DETAIL

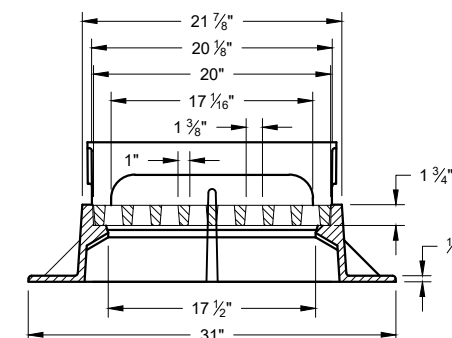
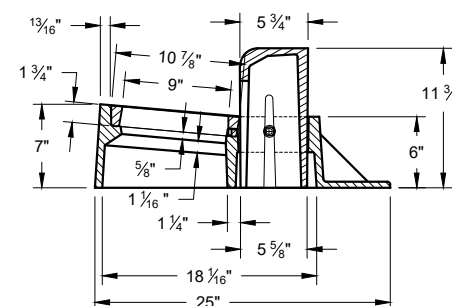


NOTE: CURB BOX HEIGHT ADJUSTABLE 6\" - 9\"

NOTE: EITHER CASTING IS ACCEPTABLE



## TYPE "A"



## TYPE "Z"

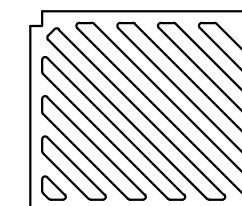
## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

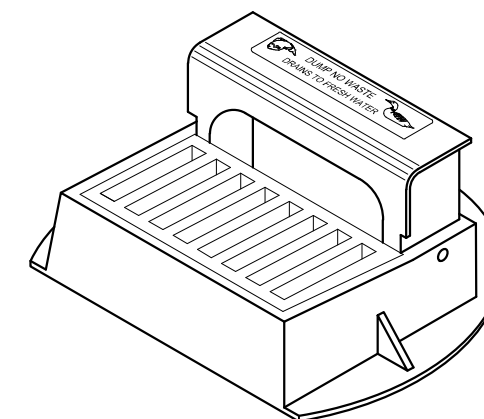
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

1" DIAGONAL BARS  
WITH 1 1/2" OPENINGS



## SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 3/4" X 17" X 1 7/8")  
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



## INLET COVERS TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
11-27-13  
DATE  
/S/ Jerry H. Zogg  
APPROVING  
ENGINEER  
FHWA

*Inlet Covers Type A, H, A-S, H-S and Z***References:**[FDM 13-25-30](#)

Neenah Foundry Company Catalog "Construction Castings"

**Bid items associated with this drawing:**

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
611.0600	Inlet Covers Type A .....	EACH
611.0603	Inlet Covers Type A-S .....	EACH
611.0624	Inlet Covers Type H .....	EACH
611.0639	Inlet Covers Type H-S .....	EACH
611.0666	Inlet Covers Type Z .....	EACH

**Standardized Special Provisions associated with this drawing:**

<u>STSP NUMBER</u>	<u>TITLE</u>
NONE	

**Other SDDs associated with this drawing:**

NONE

**Design Notes:**

When special grates are required note as Type H-S or A-S on the drainage table and use the appropriate bid item number.

Inlet covers Type H and H-S are placed on Inlets and Catch Basins 2x3-FT. Type H and H-S covers may also be placed on Inlets 4-FT Diameter, Catch Basins 4-FT, 5-FT and 6-FT Diameter with a flat top 2'x3' opening.

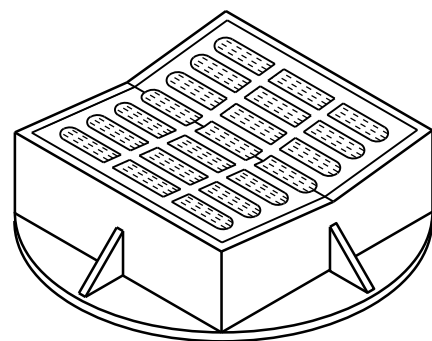
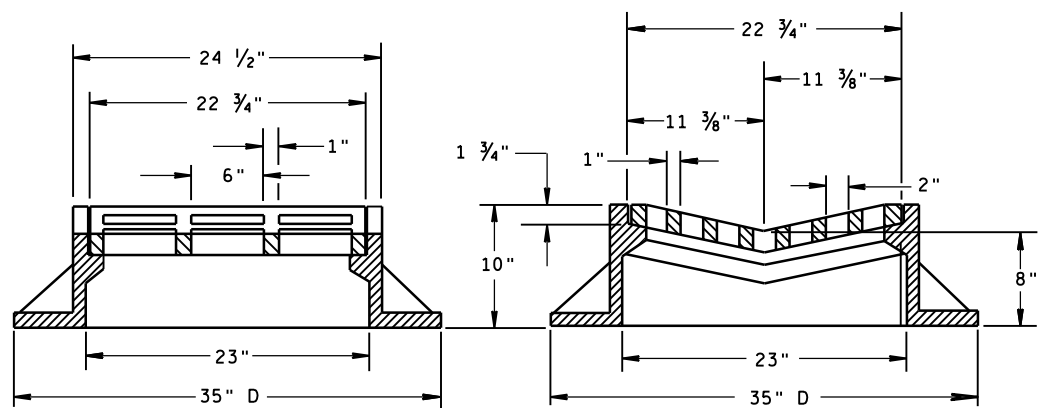
Inlet covers Type A and A-S are placed on inlets 2x2 FT. Type A and A-S covers may also be placed on Inlets 3-FT and 4-FT Diameter and Catch Basins 3-FT, 4-FT, 5-FT and 6-FT Diameter with a flat top 2'x2' opening.

Inlet Cover Type Z is placed on Inlets 3-FT and 4-FT Diameter, Catch Basins 3-FT, 4-FT, 5-FT and 6-FT Diameter with a flat top 2-FT diameter opening.

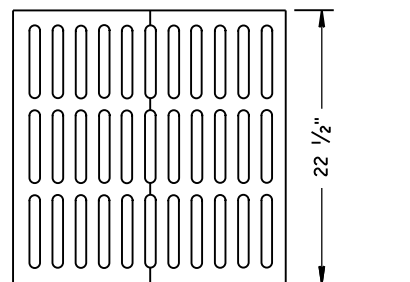
Environmental logo can be changed. This will require a special and/or construction details.

**Contact Person:**

Rodney Taylor (608) 261-8207

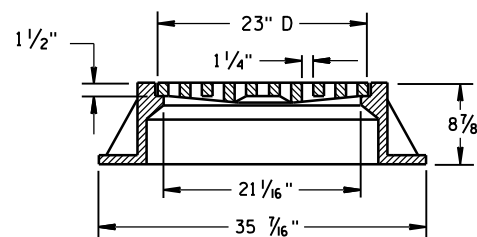
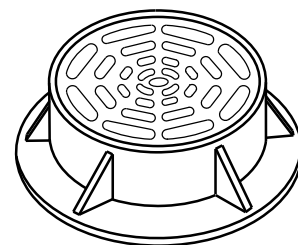
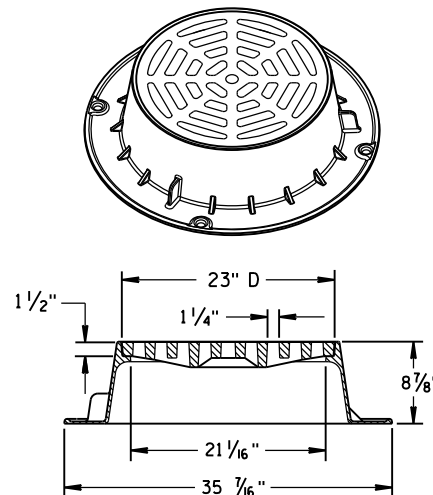


TYPE "B"



ALTERNATIVE GRATE FOR  
TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.  
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

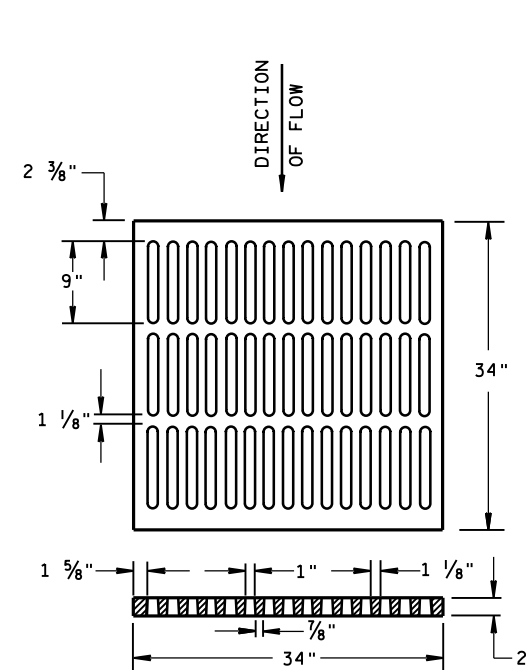
NOTE: EITHER CASTING IS ACCEPTABLE

### GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

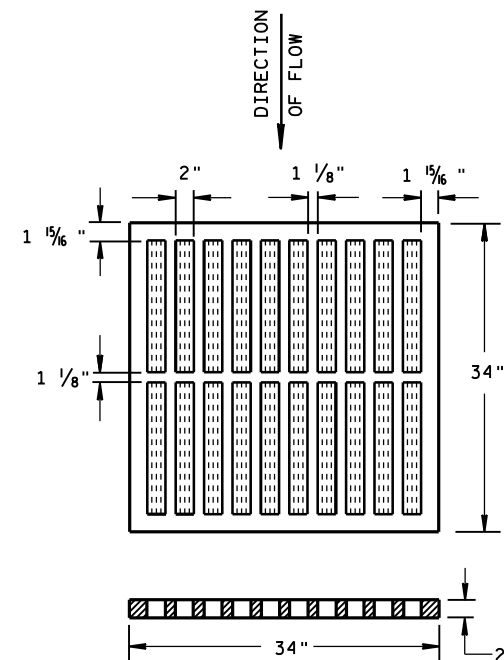
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



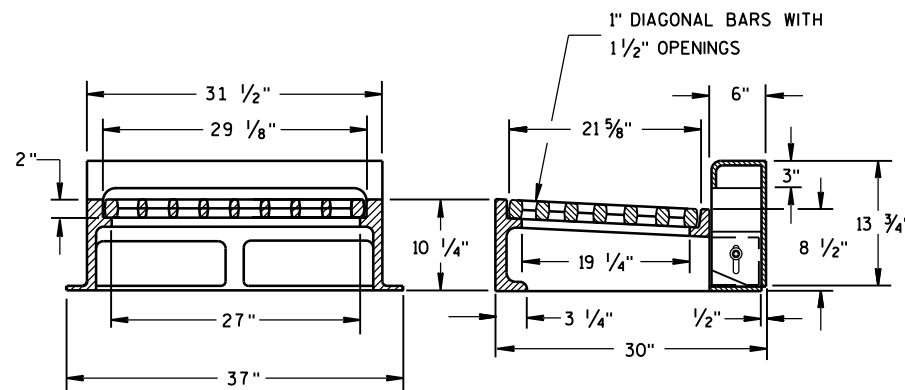
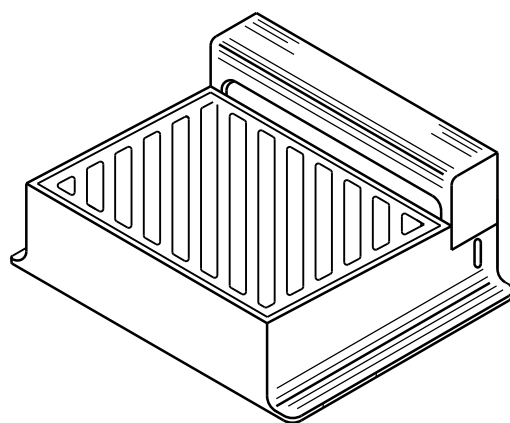
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED  
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS  
NOTED AS TYPE MS ON DRAINAGE TABLE



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

DIAGONAL SLOTS, SHALL BE ORIENTED  
TO THE DIRECTION OF FLOW AS ILLUSTRATED.  
GRATES ARE MANUFACTURED TO BE REVERSIBLE.

INLET COVERS  
TYPE B, B-A, C,  
MS, MS-A, & WM

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
11/27/2013  
DATE  
FHWA

/S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER

*Inlet Covers Type B, B-A, C, MS, MS-A, and WM***References:**[FDM 13-25-30](#)

Neenah Foundry Company Catalog "Construction Castings"

**Bid items associated with this drawing:**

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
611.0606	Inlet Covers Type B .....	EACH
611.0609	Inlet Covers Type B-A .....	EACH
611.0612	Inlet Covers Type C .....	EACH
611.0642	Inlet Covers Type MS .....	EACH
611.0645	Inlet Covers Type MS-A .....	EACH
611.0660	Inlet Covers Type WM .....	EACH

**Standardized Special Provisions associated with this drawing:**

NONE

**Other SDDs associated with this drawing:**

NONE

**Design Notes:**

When alternative grates are required, note a Type B-A or MS-A and use the appropriate bid item number.

Inlet Covers Type B and B-A are placed on Inlets 2x2-FT. Type B and B-A covers may also be placed on Inlets 3-FT and 4-FT Diameter and Catch Basins 3-FT, 4-FT, 5-FT and 6-FT Diameter with a flat top 2x2-FT opening.

Inlet Covers Type C are placed on circular inlets, circular catch basins, and square or circular manholes with a 2' diameter opening size.

Inlet Covers Type MS and MS-A are to be placed on Inlet Median 1, 2, 3, or 4 Grates.

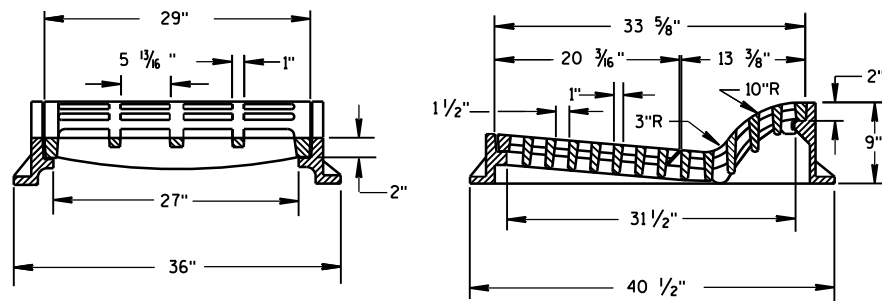
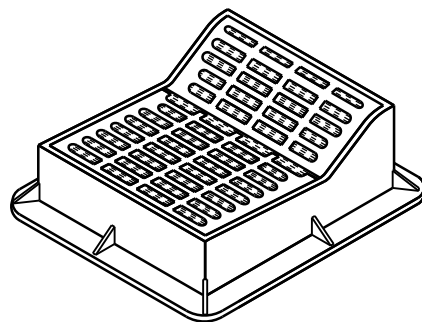
Inlet Covers Type WM is placed on Inlets and Catch Basins 2x2.5-FT. Type WM Covers may also be placed on Inlets 4-FT Diameter and Catch Basins 4-FT, 5-FT and 6-FT Diameter with a flat top 2x2.5-FT opening.

**Contact Person:**

Rodney Taylor (608) 261-8207

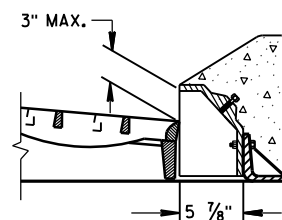


# SDD 8A5-c Inlet Covers Type F, HM, HM-S, S, T, V, HM-GJ, and HM-GJ-S



TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



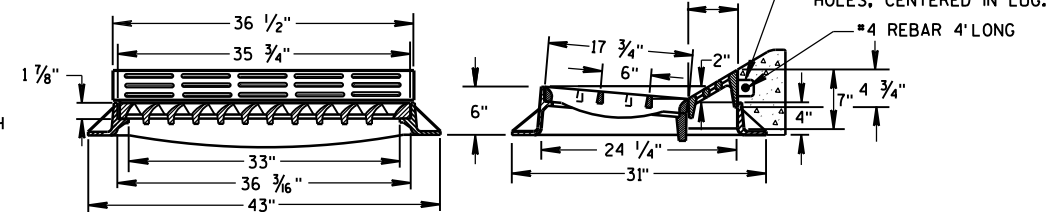
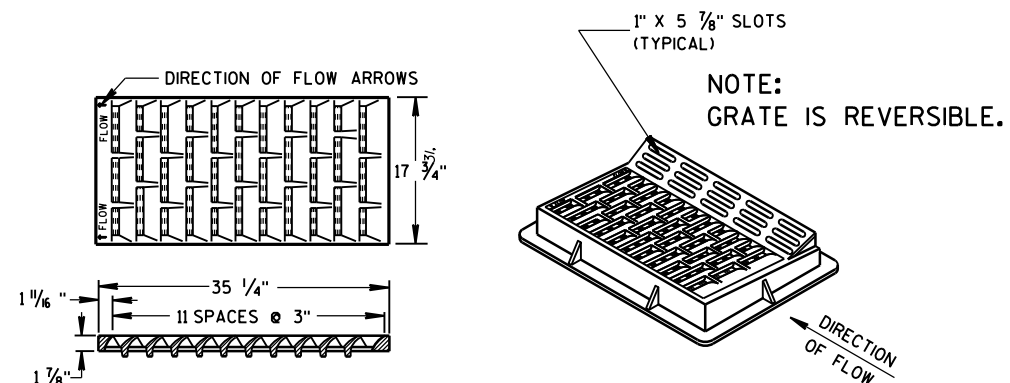
ALTERNATIVE CURB BOX  
FOR TYPE "HM" COVER

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH  
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

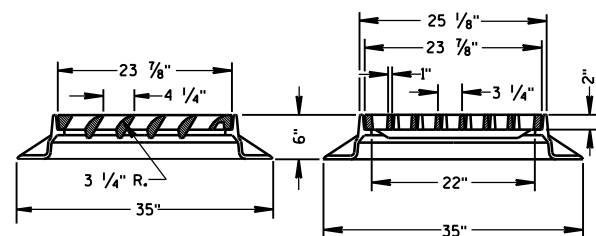
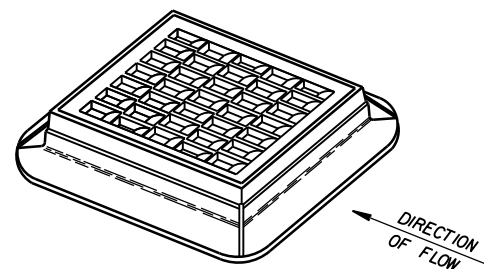
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



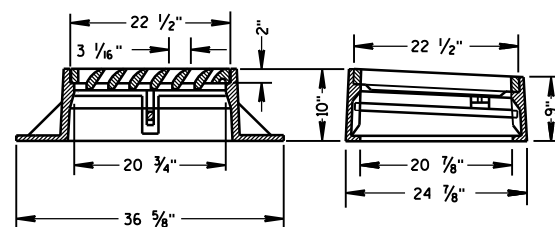
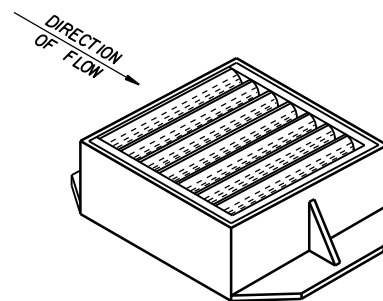
TYPE "HM"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

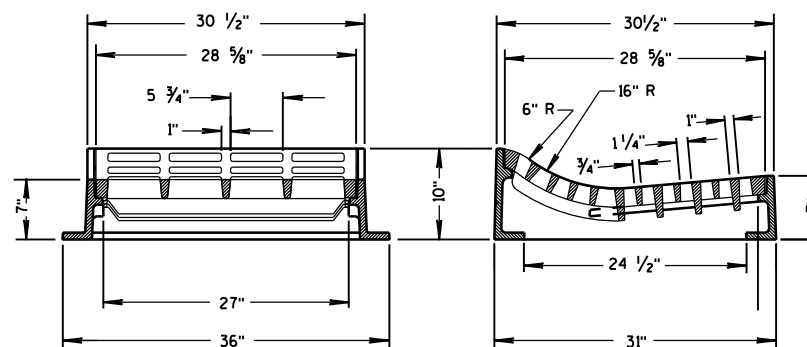
NOTE:  
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM" COVER NOTED AS TYPE HM-S ON DRAINAGE TABLE



TYPE "S"

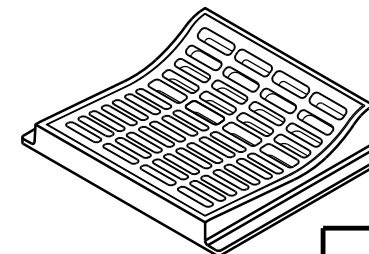


TYPE "V"



TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS  
TYPE F, HM, HM-S, S, T, V,  
HM-GJ, & HM-GJ-S

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
11/27/2013 DATE /S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER  
FHWA

*Inlet Covers Type F, HM, HM-S, S, T, V, HM-GJ, and HM-GJ-S***References:**[FDM 11-20-1](#)[FDM 11-45-50](#)[FDM 13-25-15](#)[FDM 13-25-30](#)

Neenah Foundry Company Catalog "Construction Castings"

**Bid items associated with this drawing:**

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
611.0615	Inlet Covers Type F.....	EACH
611.0627	Inlet Covers Type HM .....	EACH
611.0630	Inlet Covers Type HM-GJ.....	EACH
611.0633	Inlet Covers Type HM-GJ-S .....	EACH
611.0636	Inlet Covers Type HM-S .....	EACH
611.0651	Inlet Covers Type S.....	EACH
611.0652	Inlet Covers Type T.....	EACH
611.0654	Inlet Covers Type V.....	EACH

**Standardized Special Provisions associated with this drawing:**

<u>STSP NUMBER</u>	<u>TITLE</u>
NONE	

**Other SDDs associated with this drawing:**

NONE

**Design Notes:**

When special grate is required for Type HM cover, note the inlet as HM-S.

When special grate is required for Type HM-GJ cover, note the inlet as HM-GJ-S. Note alternative curb box for Type HM cover, note the inlet as Type HM-GJ.

Inlet cover Type F is placed on Inlets and Catch Basins 2.5x3-FT. Type F covers may also be placed on Inlets 4-FT Diameter and Catch Basins 4-FT, 5-FT and 6-FT Diameter with a flat top 2.5x3-FT opening.

Inlet Covers Type HM, HM-S, HM-GJ and HM-GJ-S are placed on Inlets and Catch Basins 2x3-FT. Type HM, HM-S, HM-GJ and HM-GJ-S covers may also be placed on Inlets 4-FT Diameter, Catch Basins 4-FT, 5-FT and 6-FT Diameter with a flat top 2x3-FT opening.

Inlet Cover Type S is placed on Inlets 2x2-FT or 2x2.5-FT. Inlet Cover Type S may also be placed on Inlets 3-FT and Catch Basin 3-FT Diameter with a flat top 2x2-FT opening or Inlets 4-FT Diameter and Catch Basins 4-FT, 5-FT and 6-FT Diameter with a flat top 2x2-FT or 2x2.5-FT opening.

Inlet Cover Type T is placed on Inlets 2x2.5-FT. Inlet Cover Type T may also be placed on Inlets 4-FT Diameter and Catch Basin 4-FT, 5-FT and 6-FT Diameter with a flat top 2x2.5-FT opening. Type T covers are used on Type R and T curb and gutter.

Inlet Cover Type V can be placed on Inlets 2x2-FT or 2x2.5-FT. However, Type V have unique dimensions that don't fit these inlets well. Consider using Inlet 3-FT or Catch Basin 3-FT to 6-FT with a 24x21-Inch centered opening. A special construction detail will be required.

**Contact Person:**

Rodney Taylor (608) 261-8207





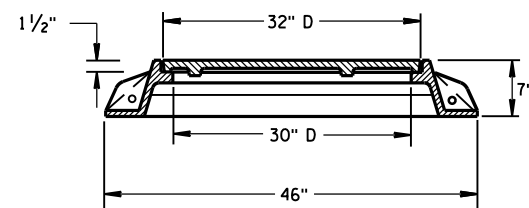
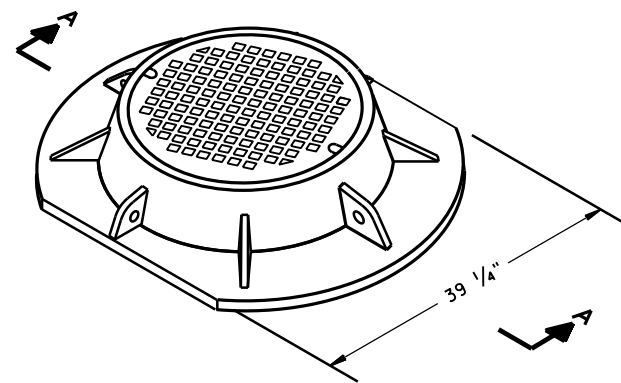
# SDD 8A5-d Inlet Covers Type BW; Manhole Covers Type J, J-S, K, L and M

## GENERAL NOTES

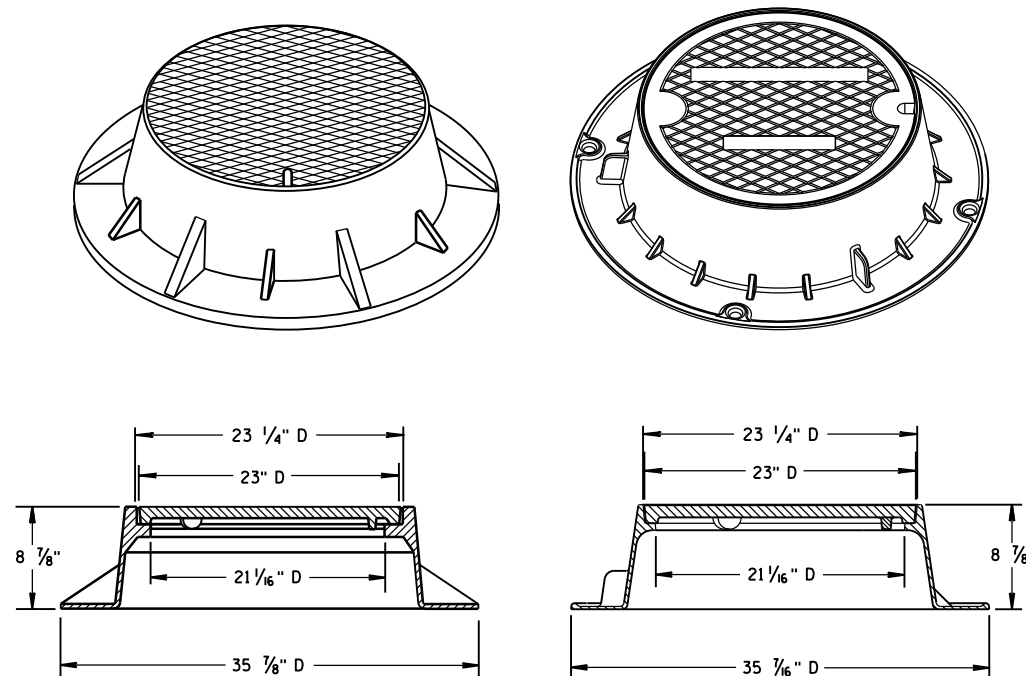
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

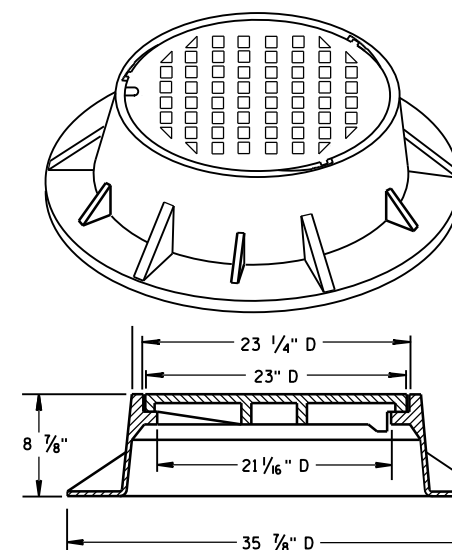
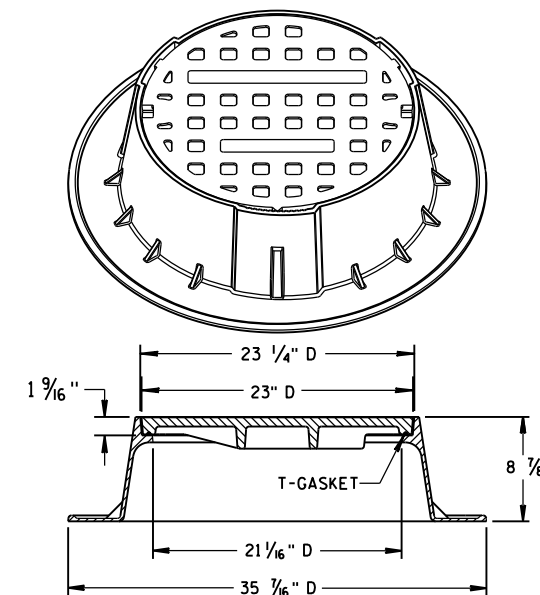


SECTION A-A  
TYPE "K"



TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

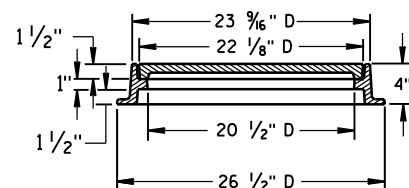
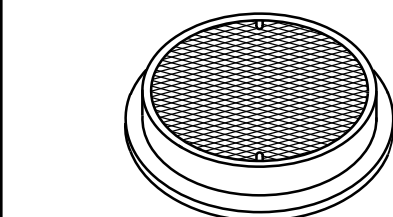


TYPE "J" SPECIAL

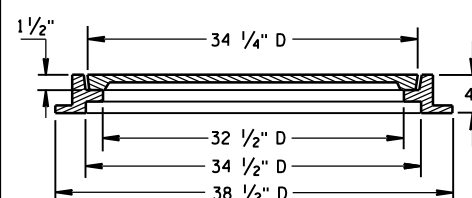
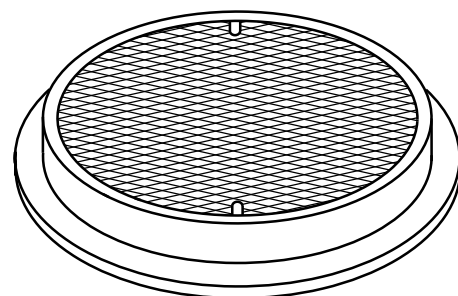
TYPE "B" NON-ROCKING SELF-SEAL LID

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

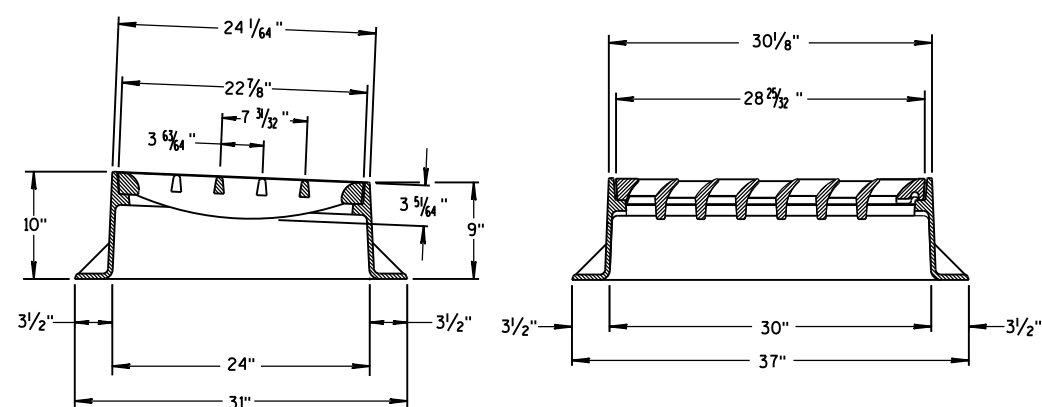
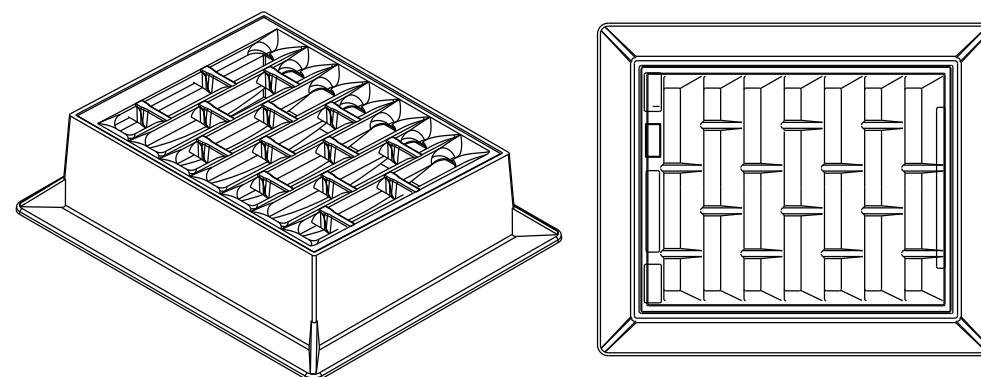
NOTE: EITHER CASTING IS ACCEPTABLE



TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"

INLET COVER TYPE BW  
MANHOLE COVERS, TYPE K,  
J, J-S, L & M

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
11/27/2013  
DATE  
FHWA

/S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER

*Inlet Covers Type BW; Manhole Covers Type J, J-S, K, L and M***References:**[FDM 13-25-30](#)

Neenah Foundry Company Catalog "Construction Castings"

**Bid items associated with this drawing:**

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
611.0530	Manhole Covers Type J .....	EACH
611.0535	Manhole Covers Type J-Special.....	EACH
611.0540	Manhole Covers Type K.....	EACH
611.0545	Manhole Covers Type L .....	EACH
611.0550	Manhole Covers Type M .....	EACH
611.0610	Inlet Covers Type BW .....	EACH

**Standardized Special Provisions associated with this drawing:**

<u>STSP NUMBER</u>	<u>TITLE</u>
NONE	

**Other SDDs associated with this drawing:**

NONE

**Design Notes:**

Manhole Covers Type J and J-Special are placed on manholes with flat top 2-FT diameter openings.

Manhole Cover Type K is placed on manholes with a flat top 3-FT diameter opening.

Manhole Cover Type L is placed on manholes with a flat top 2-FT diameter opening.

Manhole Cover Type M is placed on manholes with a flat top 3-FT diameter opening.

Inlet Cover Type BW is placed on Inlets 2x2.5-FT. Type BW covers may also be placed on Inlets 4-FT Diameter, Catch Basins 4-FT, 5-FT and 6-FT Diameter with a flat top 2x2.5-FT opening. These inlets were designed to be used in front of barrier walls.

Environmental logo can be changed. This will require a special and/or construction details.

**Contact Person:**

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